### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023188 Address: 333 Burma Road **Date Inspected:** 26-Apr-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. Sun Tian Liang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Segment

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT) – NWIT Document No's: 008934

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 13AE. The weld designations reviewed are as follows:

- 1. SEG3007S-028, 022, 024, 025
- 2. SEG3007N-034, 035, 036, 037
- 3. KP3002-001-006, 007, 008, 009, 010, 011, 012
- 4. SEG3007AH-122, 140, 155, 125, 143

**OBG** Trail Assembly

This QA Inspector observed the following work in progress:

SMAW welding of temporary attachment areas located on Edge Plate and Side Plate at bike path side edge of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable

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WPS-345-SMAW-4G-(4F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2879.

SMAW welding of weld joint OBW13K-001, 004 and 007 located on Corner Assembly RS stiffener to Corner Assembly RS Stiffener of OBG Segment 13B+CW. ZPMC Welder is identified as 066422. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-4213-B-U2-FCM-1.

This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on Deck Panel Diaphragm to Floor Beam Flange Weld at Panel point 123 CB Side of OBG Segment 13CW. The weld number is identified as SEG3015J.

This QA inspector observed ABF personnel performed Ultrasonic Testing (UT) on Deck Panel to Deck Panel of OBG Segment 13BW and OBG Segment 13CW. The weld number is identified as OBW13A-016.

SMAW welding of weld joint SEG3013Q-233 located on OBG Segment 13AW. ZPMC Welder is identified as 0666398. ZPMC Quality Control (QC) is identified as Mr. An Xing Qing. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20637

SMAW welding of weld joint SP3103-001-067 located on side plate of OBG Segment 13AW. ZPMC Welder is identified as 067610. ZPMC Quality Control (QC) is identified as Mr. An Xing Qing. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20811.

SMAW welding of weld joint SEG3013AD-035 located on OBG Segment 13AW. ZPMC Welder is identified as 037748. ZPMC Quality Control (QC) is identified as Mr. An Xing Qing. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair-1, which is used as per Critical Welding Repair Report (CWR) B-CWR-2935.

SMAW welding of weld joint FB3178-001-168 located on floor beam of OBG Segment 13AW. ZPMC Welder is identified as 066443. ZPMC Quality Control (QC) is identified as Mr. An Xing Qing. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20819.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar, Vibin Quality Assurance Inspector **Reviewed By:** Patel, Hiranch QA Reviewer